

Items	Description
20537	SHIGA (1W) TOXIN
1	S1 AND 2E (1W) SHIGA (1W) TOXIN
229	S1 AND STX2E
3	S3 AND STX2EB
3	RD (unique items)
2034	S1 AND STX2
132	S6 AND S3
4	S7 AND HIS
4	RD (unique items)

s9/3,ab/1-4

No matching display code(s) found in file(s): 65, 128, 135, 180, 342, 345, 398, 429

/3,AB/1 (Item 1 from file: 349)  
 ALOG(R)File 349:PCT FULLTEXT  
 2004 WIPO/Univentio. All rts. reserv.

763190  
 COMBINANT FUSION PROTEIN, (VACCINE) COMPOSITION CONTAINING THE SAME AND METHOD FOR THE PRODUCTION THEREOF  
 PROTEINE DE FUSION RECOMBINEE, COMPOSITION (DE VACCIN) CONTENANT CETTE DERNIERE ET PROCEDE DE PRODUCTION DE LADITE PROTEINE  
 KOMBINANTES FUSIONS-PROTEIN, DIESES ENTHALTENDE (IMPF-)STOFFZUSAMMENSETZUNG UND VERFAHREN ZU DESSEN HERSTELLUNG

Applicant/Assignee:

LOHMANN ANIMAL HEALTH GMBH & CO KG, Heinz-Lohmann-Str. 4, D-27472 Cuxhaven, DE, DE (Residence), DE (Nationality), (For all designated states except: US)

Applicant/Inventor:

BALJER Georg, Ludwig-Rinn-Strasse 15, D-35452 Heuchelheim, DE, DE (Residence), DE (Nationality), (Designated only for: US )

FRANKE Sylvia, Elly-Heuss-Knapp-Weg 18, D-35396 Giessen, DE, DE (Residence), DE (Nationality), (Designated only for: US )

Legal Representative:

SIEMONS Norbert, Neuer Wall 41, D-20354 Hamburg, DE

Agent and Priority Information (Country, Number, Date):

Patent: WO 200075345 A1 20001214 (WO 0075345)

Application: WO 2000EP5127 20000605 (PCT/WO EP0005127)

Priority Application: EP 99110759 19990604

Designated States: AU BY CN HU PL RU UA US

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: German

Original Language: German

Fulltext Word Count: 6025

English Abstract

The invention relates to a recombinant fusion protein, containing a subgenomic %Stx2e% fragment of the %Shiga% %toxin% 2e (%Stx2e%) in fusion with a terminal tag, whose size corresponds approximately to that of the fragment or to a fraction of said fragment.

French Abstract

L'invention concerne une proteine de fusion recombinée, comportant un fragment %Stx2e% subgénique de la toxine Shiga (%Stx2e%) en fusion avec une étiquette terminale dont la taille correspond approximativement à celle du fragment ou d'une fraction de fragment.

German Abstract

Rekombinantes Fusionsprotein mit einem subgenischen %Stx2e%-Fragment des Shiga Toxins 2e (%Stx2e%) in Fusion mit einem terminalen Tag, dessen Grosse etwa der Grosse des Fragmentes oder eines Bruchteils des Fragmentes entspricht.

/3,AB/2 (Item 2 from file: 349)  
 ALOG(R)File 349:PCT FULLTEXT  
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*Applicant 3*

0568674

PLASMID MAINTENANCE SYSTEM FOR ANTIGEN DELIVERY

SYSTEME DE STABILISATION DE PLASMIDES PERMETTANT D'ADMINISTRER DES ANTIGENES

Patent Applicant/Assignee:

UNIVERSITY OF MARYLAND BALTIMORE,

GALEN James E,

Inventor(s):

GALEN James E,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200032047 A1 20000608 (WO 0032047)

Application: WO 99US28499 19991202 (PCT/WO US9928499)

Priority Application: US 98204117 19981202; US 99158738 19991012

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE

ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT

LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT

UA UG US VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ

MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ

CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 34866

English Abstract

The present invention relates generally to a Plasmid Maintenance System for the stabilization of expression plasmids encoding foreign antigens, and methods for making and using the Plasmid Maintenance System. The invention optimizes the maintenance of expression plasmids at two independent levels by: (1) removing sole dependence on balanced lethal maintenance functions; and (2) incorporating at least one plasmid partition function to prevent random segregation of expression plasmids, thereby enhancing their inheritance and stability. The Plasmid Maintenance System may be employed within a plasmid which has been recombinantly engineered to express a variety of expression products.

French Abstract

L'invention concerne en general un systeme de stabilisation de plasmides, permettant de stabiliser des plasmides d'expression qui codent pour des antigenes etrangers, et des procedes de production et d'utilisation dudit systeme de stabilisation de plasmides. L'invention optimise la stabilisation de plasmides a deux niveaux independants: 1) par elimination d'une dependance exclusive sur des fonctions de stabilisation letale equilibrees; et 2) par incorporation d'au moins une fonction de partition de plasmide, afin d'empecher la segregation aleatoire des plasmides d'expression, ce qui ameliore leur heredite et leur stabilite. Le systeme de stabilisation de plasmides peut etre utilise dans un plasmide qui a ete mis au point par genie genetique par recombinaison, afin d'exprimer une variete de produits d'expression.

9/3,AB/3 (Item 3 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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0420768

HISTIDINE-TAGGED SHIGA TOXINS, TOXOIDS, AND PROTEIN FUSIONS WITH SUCH TOXINS AND TOXOIDS, METHODS FOR THE PURIFICATION AND PREPARATION THEREOF

TOXINES ET TOXOIDES SHIGA A MARQUES PAR L'HISTIDINE, FUSIONS DE PROTEINES AVEC CES TOXINES ET TOXOIDES, ET LEURS PROCEDES DE PURIFICATION ET DE PREPARATION

Patent Applicant/Assignee:

HENRY M JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE,

Inventor(s):

O'BRIEN Alison D,

SCHMITT Clare K,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9811229 A2 19980319

Application: WO 97US15836 19970909 (PCT/WO US9715836)

Priority Application: US 9625637 19960910  
Designated States: AU CA JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT  
SE  
Publication Language: English  
Fulltext Word Count: 8188  
English Abstract

The present invention describes the isolation and purification of biologically and immunologically active histidine-tagged Shiga toxins (%His%-tagged), a toxin associated with HC and the potentially life-threatening sequela HUS transmitted by strains of pathogenic bacteria. The present invention describes how %his%-tagging greatly simplifies and expedites purifying Shiga toxins, and describes an improved method for such purification. One aspect of the invention is obtaining and using Shiga toxoids that are immunoreactive but not toxic. Another aspect of the invention is obtaining and using fusion proteins of %His%-tagged Shiga toxins or toxoids. Yet another aspect of the invention is obtaining and using antibodies to %His%-tagged Shiga toxins, toxoids, or %Shiga% %toxin%/toxoid fusion proteins.

#### French Abstract

L'invention concerne l'isolement et la purification de toxines Shiga a activite biologique et immunologique, marquees par l'histine, une toxine associee a la colite hemorragique et a des sequelles du syndrome hemolytique et uremique potentiellement mortelles transmis par des souches de bacteries pathogenes. L'invention decrit comment ce marquage par l'histidine simplifie et accelere grandement la purification des toxines Shiga ainsi qu'un procede ameliore pour effectuer ladite purification. L'un des aspects de l'invention porte sur l'obtention et l'utilisation de toxoides Shiga immunoreactifs mais non toxiques. Un autre aspect de l'invention porte sur la production et l'utilisation de proteines fusionnees a des toxines ou toxoides Shiga marques par l'histine. L'invention porte en outre sur la production et sur l'utilisation d'anticorps anti toxines ou toxoides Shiga marques par l'histine ou anti proteines fusionnees a des toxines ou toxoides Shiga.

9/3,AB/4 (Item 1 from file: 484)  
DIALOG(R) File 484:Periodical Abs Plustext  
c) 2004 ProQuest. All rts. reserv.

4485741 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
Enteropathogenic Escherichia coli in Psittaciformes  
Schremmer, Caroline; Lohr, J E; Wastlhuber, U; Kusters, J; et al  
Avian Pathology (AVP), v28 n4, p349-354, p.6  
Aug 1999  
ISSN: 0307-9457 JOURNAL CODE: AVP  
DOCUMENT TYPE: Feature  
LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 4176

ABSTRACT: A total of 103 Escherichia coli isolates from psittaciform birds were examined for the presence of genes coding for shigatoxin 1 (Stx1), shigatoxin 2 (%Stx2%) and for intimin (eae), using the polymerase chain reaction (PCR). Sixty-eight E. coli strains were isolated from necropsy cases and faecal samples, the other 35 were from 205 cloacal swabs from psittaciformes with various conditions.

ds

et	Items	Description
1	20537	SHIGA (1W) TOXIN
2	1	S1 AND 2E (1W) SHIGA (1W) TOXIN
3	229	S1 AND STX2E
4	3	S3 AND STX2EB
5	3	RD (unique items)

t s5/3,ab/1-3

>>No matching display code(s) found in file(s): 65, 128, 135, 180, 342, 345, 398, 429

5/3,AB/1 (Item 1 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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0763190  
RECOMBINANT FUSION PROTEIN, (VACCINE) COMPOSITION CONTAINING THE SAME AND  
METHOD FOR THE PRODUCTION THEREOF  
PROTEINE DE FUSION RECOMBINEE, COMPOSITION (DE VACCIN) CONTENANT CETTE  
DERNIERE ET PROCEDE DE PRODUCTION DE LADITE PROTEINE  
REKOMBINANTES FUSIONSPROTEIN, DIESES ENTHALTENDE (IMPF-)STOFFZUSAMMENSETZUN  
G UND VERFAHREN ZU DESSEN HERSTELLUNG

Patent Applicant/Assignee:

LOHMANN ANIMAL HEALTH GMBH & CO KG, Heinz-Lohmann-Str. 4, D-27472  
Cuxhaven, DE, DE (Residence), DE (Nationality), (For all designated  
states except: US)

Patent Applicant/Inventor:

BALJER Georg, Ludwig-Rinn-Strasse 15, D-35452 Heuchelheim, DE, DE  
(Residence), DE (Nationality), (Designated only for: US )  
FRANKE Sylvia, Elly-Heuss-Knapp-Weg 18, D-35396 Giessen, DE, DE  
(Residence), DE (Nationality), (Designated only for: US )

Legal Representative:

SIEMONS Norbert, Neuer Wall 41, D-20354 Hamburg, DE

Patent and Priority Information (Country, Number, Date):

Patent: WO 200075345 A1 20001214 (WO 0075345)

Application: WO 2000EP5127 20000605 (PCT/WO EP0005127)

Priority Application: EP 99110759 19990604

Designated States: AU BY CN HU PL RU UA US

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: German

Filing Language: German

Fulltext Word Count: 6025

English Abstract

The invention relates to a recombinant fusion protein, containing a  
subgenetic %Stx2e% fragment of the %Shiga% %toxin% 2e (%Stx2e%) in fusion  
with a terminal tag, whose size corresponds approximately to that of the  
fragment or to a fraction of said fragment.

French Abstract

L'invention concerne une proteine de fusion recombinee, comportant un  
fragment %Stx2e% subgenique de la toxine Shiga (%Stx2e%) en fusion avec  
une etiquette terminale dont la taille correspond approximativement a  
celle du fragment ou d'une fraction de fragment.

German Abstract

Rekombinantes Fusionsprotein mit einem subgenischen %Stx2e%-Fragment des  
Shiga Toxins 2e (%Stx2e%) in Fusion mit einem terminalen Tag, dessen  
Grosse etwa der Grosse des Fragmentes oder eines Bruchteils des  
Fragmentes entspricht.

5/3,AB/2 (Item 1 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

01220293

Fusion protein comprising %Shiga% %toxin% 2e B subunit,

(vaccine) compositions comprising it, and methods for their production  
onsprotein das das Fragment B des Shigatoxins enthalt, dieses  
enthaltende (Impf-)Stoffzusammensetzung und Verfahren zu dessen  
Herstellung

eine de fusion comprenant le fragment B de la toxine de Shiga,  
preparation (vaccinale) la comprenant, et procede pour leur preparation

NT ASSIGNEE:

hmann Animal Health GmbH & Co. KG, (2189640), Heinz-Lohmann-Strasse 4,  
27472 Cuxhaven, (DE), (Applicant designated States: all)

NTOR:

ljer, Georg, Prof.Dr., Ludwig-Rinn-Strasse 15, 35452 Heuchelheim, (DE)  
anke, Silvia, Dr., Elly-Heuss-Knapp-Weg 18, 35396 Giessen, (DE)

L REPRESENTATIVE:

tentanwalte Hauck, Graalfs, Wehnert, Doring, Siemons (100551), Neuer  
Wall 41, 20354 Hamburg, (DE)

NT (CC, No, Kind, Date): EP 1057895 A1 001206 (Basic)

ICATION (CC, No, Date): EP 99110759 990604;

GNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
; PT; SE

NDED DESIGNATED STATES: LT; LV; MK; RO; SI

ERNATIONAL PATENT CLASS: C12N-015/62; C07K-014/245; A61K-038/16;

7K-016/12

TRACT EP 1057895 A1 (Translated)

New fusion protein, useful as vaccines against pig edema disease,

mprires fragment of %Shiga% %toxin% 2e fused to terminal tag

A fusion protein (I) comprising a fragment of %Shiga% %toxin% 2e (

%Stx2e%) fused to a terminal tag whose size is no greater than that of

ne %Stx2e% fragment, is new.

Independent claims are also included for the following:

(1) a vaccine (II) comprising (I) for various uses in animal diseases  
ssociated with edema;

(2) a plasmid (III) comprising DNA encoding (I);

(3) an Escherichia coli strain transformed with (III);

(4) production of (I) by cloning a subunit of the %Stx2e% operon in a

ector system, transforming an Escherichia coli strain with the resulting

ecombinant plasmid, inducing the resulting expression system, and

xpressing and purifying the fusion protein; and

(5) production of hybridoma clones for producing anti-%Stx2eB%

mmunoglobulins by fusing spleen cells from mice immunized with (I) with

veloma cells.

NSLATED ABSTRACT WORD COUNT: 149

TRACT EP 1057895 A1

Rekombinantes Fusionsprotein mit einem subgenischen %Stx2e%-Fragment

es Shiga Toxins 2e (%Stx2e%) in Fusion mit einem terminalen Tag, dessen

rose etwa der Grose des Fragmentes oder eines Bruchteils des Fragmentes

entspricht.

TRACT WORD COUNT: 31

GUAGE (Publication,Procedural,Application): German; German; German

TEXT AVAILABILITY:

ilable Text	Language	Update	Word Count
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CLAIMS A	(German)	200049	559
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SPEC A	(German)	200049	2444
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al word count - document A			3003
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al word count - document B			0
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al word count - documents A + B			3003
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3,AB/3 (Item 1 from file: 357)

LOG(R)File 357:Derwent Biotech Res.

2004 Thomson Derwent & ISI. All rts. reserv.

4643 DBR Accession No.: 2001-04397 PATENT

fusion protein, useful as vaccines against edema disease, comprises

fragment of %shiga% %toxin%-2e to terminal tag - %shiga% %toxin%-2e

fragment useful as recombinant vaccine

HOR: Baljer G; Franke S

applicant

applicant

REPORT SOURCE: Cuxhaven, Germany.

INVENTOR: Lohmann-Animal-Health 2000

PATENT NUMBER: EP 1057895 PATENT DATE: 20001206 WPI ACCESSION NO.:

2001-051987 (2007)

PRIORITY APPLIC. NO.: EP 99110759 APPLIC. DATE: 19990604

INTERNATIONAL APPLIC. NO.: EP 99110759 APPLIC. DATE: 19990604

LANGUAGE: German

ABSTRACT: A fusion protein (I) is claimed. (I) contains a fragment of  
%Shiga% toxin-2e (%Stx2e%) fused to a terminal tag whose size is no  
greater than that of the %Stx2e% fragment. Also claimed are: a vaccine  
(II) containing DNA encoding (I); a Escherichia coli strain transformed  
with (III); production of (I) by cloning a subunit of the %Stx2e%  
operon in a vector system, transforming an E. coli strain with the  
resulting recombinant plasmid, including the resulting expression  
system, and expressing and purifying the fusion protein; and production  
of hybridoma clones for producing anti-%Stx2eB% immunoglobulins. (I) is  
useful for vaccinating animals, especially pigs, against edema disease,  
for detecting anti-%Stx2e% antibodies, for diagnosis of edema disease  
and for production of (I) and for affinity purification of the  
holotoxin. (15pp)

Set	Items	Description
cuting	TD290	
ight	option is	not available in file(s) 19, 398, 399
IGHT	set on as	'%'
	36142	SHIGA
	762528	TOXIN
S1	20537	SHIGA (1W) TOXIN
s1 and 2e (1w)		shiga (1w) toxin
	20537	S1
	199307	2E
	36142	SHIGA
	762528	TOXIN
	1	2E(1W)SHIGA(1W)TOXIN
S2	1	S1 AND 2E (1W) SHIGA (1W) TOXIN
s2/3,ab/1		
No matching display code(s) found in file(s): 65, 128, 135, 180, 342, 345, 398, 429		
3,AB/1	(Item 1 from file: 399)	
ALOG(R)	File 399:CA SEARCH(R)	
2004 American Chemical Society. All rts. reserv.		
39274872	CA: 139(18)274872h	JOURNAL
Binding of shiga toxin 2e to porcine erythrocytes in vivo and in vitro		
AUTHOR(S): Matise, Ilze; Cornick, Nancy A.; Samuel, James E.; Moon, W. W.		
LOCATION: Veterinary Medical Research Institute, Iowa State University, Ames, IA, 50011, USA		
JOURNAL: Infect. Immun. (Infection and Immunity) DATE: 2003 VOLUME: 71		
NUMBER: 9 PAGES: 5194-5201 CODEN: INFIBR ISSN: 0019-9567 LANGUAGE: English		
PUBLISHER: American Society for Microbiology		

Items	Index-term
6	*AU=BALJER, G
256	AU=BALJER, G.
19	AU=BALJER, GEORG
2	AU=BALJER, GEORG 1945-
1	AU=BALJER,G.
12	AU=BALJET
2	AU=BALJET A L
1	AU=BALJET A M C
3	AU=BALJET A V
1	AU=BALJET A.V.
1	AU=BALJET AMC
2	AU=BALJET ANTON

Enter P or PAGE for more

e1-e5  
One or more prefixes are unsupported  
or undefined in one or more files.

6	AU=BALJER, G
256	AU=BALJER, G.
19	AU=BALJER, GEORG
2	AU=BALJER, GEORG 1945-
1	AU=BALJER,G.
S12	284 E1-E5
s12 and shiga	284 S12
	36142 SHIGA
S13	49 S12 AND SHIGA

d  
Duplicate detection is not supported for File 349.  
Duplicate detection is not supported for File 398.  
Duplicate detection is not supported for File 654.  
Duplicate detection is not supported for File 348.  
Duplicate detection is not supported for File 340.  
Duplicate detection is not supported for File 342.  
Duplicate detection is not supported for File 345.  
Duplicate detection is not supported for File 286.  
Duplicate detection is not supported for File 19.  
Duplicate detection is not supported for File 128.  
Duplicate detection is not supported for File 429.

Records from unsupported files will be retained in the RD set.  
completed exams records

S14	25 RD (unique items)
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Items	Description
20537	SHIGA (1W) TOXIN
1	S1 AND 2E (1W) SHIGA (1W) TOXIN
229	S1 AND STX2E
3	S3 AND STX2EB
3	RD (unique items)
2034	S1 AND STX2
132	S6 AND S3
4	S7 AND HIS
4	RD (unique items)
20537	SHIGA (1W) TOXIN
229	S10 AND STX2E
284	E1-E5
49	S12 AND SHIGA
25	RD (unique items)

s14/3,ab/1-25

No matching display code(s) found in file(s): 65, 128, 135, 180, 342,  
345, 398, 429

/3,AB/1 (Item 1 from file: 399)

LOG(R)File 399:CA SEARCH(R)

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9163548 CA: 139(11)163548n JOURNAL  
otoxin 1 from Escherichia coli affects Gb3/CD77+ bovine lymphocytes  
pendent of interleukin-2, tumor necrosis factor- $\alpha$ , and  
rferon- $\alpha$   
THOR(S): Menge, Christian; Stamm, Ivonne; Blessenohl, Maike; Wieler,  
ar H.; Baljer, Georg  
CATION: Institut fuer Hygiene und Infektionskrankheiten der Tiere,  
us-Liebig-Universitaet, Giessen, Germany, D-35392  
URNAL: Exp. Biol. Med. (Maywood, NJ, U. S.) (Experimental Biology and  
icine (Maywood, NJ, United States)) DATE: 2003 VOLUME: 228 NUMBER: 4  
GES: 377-386 CODEN: EBMMBE ISSN: 1535-3702 LANGUAGE: English  
BLISHER: Society for Experimental Biology and Medicine

3,AB/2 (Item 2 from file: 399)  
OG(R)File 399:CA SEARCH(R)  
2004 American Chemical Society. All rts. reserv.

8220287 CA: 138(15)220287g JOURNAL  
vine lymphocytes express functional receptors for Escherichia coli  
a toxin 1  
THOR(S): Stamm, Ivonne; Wuhrer, M.; Geyer, R.; Baljer, G.; Menge, Ch.  
CATION: Institut fur Hygiene und Infektionskrankheiten der Tiere der  
us-Liebig-Universitat, Giessen, Germany,  
URNAL: Microb. Pathog. (Microbial Pathogenesis) DATE: 2002 VOLUME: 33  
MBER: 6 PAGES: 251-264 CODEN: MIPAEV ISSN: 0882-4010  
BLISHER ITEM IDENTIFIER: 0882-4010(02)90527-9 LANGUAGE: English  
BLISHER: Elsevier Science Ltd.

3,AB/3 (Item 3 from file: 399)  
OG(R)File 399:CA SEARCH(R)  
2004 American Chemical Society. All rts. reserv.

5031105 CA: 135(3)31105y JOURNAL  
e AIDA autotransporter system is associated with F18 and Stx2e in  
erichia coli isolates from pigs diagnosed with edema disease and  
weaning diarrhea  
THOR(S): Niewerth, Ulla; Frey, Andreas; Voss, Thomas; Le Bouguenec,  
tal; Baljer, Georg; Franke, Sylvia; Schmidt, M. Alexander  
CATION: Institut fur Infektiologie, Zentrum fur Molekularbiologie der  
undung, Westfalische Wilhelms-Universitat, Munster, Germany, D-48149  
URNAL: Clin. Diagn. Laboratory Immunol. DATE: 2001 VOLUME: 8 NUMBER: 1  
GES: 143-149 CODEN: CDIMEN ISSN: 1071-412X LANGUAGE: English  
BLISHER: American Society for Microbiology

3,AB/4 (Item 4 from file: 399)  
OG(R)File 399:CA SEARCH(R)  
2004 American Chemical Society. All rts. reserv.

4016533 CA: 134(2)16533x PATENT  
sion proteins of subunit B of Shiga toxin 2e and an affinity label and  
r preparation and vaccine use  
VENTOR(AUTHOR): Baljer, Georg; Franke, Silvia  
CATION: Germany,  
SIGNEE: Lohmann Animal Health G.m.b.H. & Co. K.-G.  
TENT: European Pat. Appl. ; EP 1057895 A1 DATE: 20001206  
PLICATION: EP 99110759 (19990604)  
GES: 15 pp. CODEN: EPXXDW LANGUAGE: German CLASS: C12N-015/62A;  
-014/245B; A61K-038/16B; C07K-016/12B DESIGNATED COUNTRIES: AT; BE; CH  
; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE; MC; PT; IE; SI; LT; LV; FI;

} appl. cart

3,AB/5 (Item 5 from file: 399)  
OG(R)File 399:CA SEARCH(R)  
2004 American Chemical Society. All rts. reserv.

1072639 CA: 131(6)72639m JOURNAL  
Shiga toxin 1 from Escherichia coli blocks activation and proliferation  
of bovine lymphocyte subpopulations in vitro  
THOR(S): Menge, C.; Wieler, L. H.; Schlapp, T.; Baljer, G.  
LOCATION: Institut für Hygiene und Infektionskrankheiten der Tiere der  
Universität Giessen, Germany, D-35392  
JOURNAL: Infect. Immun. DATE: 1999 VOLUME: 67 NUMBER: 5 PAGES:  
1072-1077 CODEN: INFIBR ISSN: 0019-9567 LANGUAGE: English PUBLISHER:  
American Society for Microbiology

3,AB/6 (Item 6 from file: 399)  
LOG(R)File 399:CA SEARCH(R)  
2004 American Chemical Society. All rts. reserv.

6071050 CA: 126(6)71050x JOURNAL  
Shiga toxin-producing Escherichia coli strains from bovines: association  
with carriage of eae and other genes  
THOR(S): Wieler, L. H.; Vieler, E.; Erpenstein, C.; Schlapp, T.;  
Hörnig, H.; Bauerfeind, R.; Byomi, A.; Baljer, G.  
LOCATION: Institut für Hygiene und Infektionskrankheiten der Tiere der  
Universität Giessen, Giessen, Germany, D-35392  
JOURNAL: J. Clin. Microbiol. DATE: 1996 VOLUME: 34 NUMBER: 12 PAGES:  
2284-2288 CODEN: JCMIDW ISSN: 0095-1137 LANGUAGE: English PUBLISHER:  
American Society for Microbiology

3,AB/7 (Item 7 from file: 399)  
LOG(R)File 399:CA SEARCH(R)  
2004 American Chemical Society. All rts. reserv.

5320242 CA: 125(25)320242p JOURNAL  
The enterohemolysin phenotype of bovine Shiga-like toxin-producing  
Escherichia coli (SLTEC) is encoded by the EHEC-hemolysin gene  
THOR(S): Wieler, Lothar H.; Tigges, Magdalene; Ebel, Frank;  
Hörnig, Silke; Djafari, Soudabeh; Schlapp, Tobias; Baljer, Georg;  
Hörnig, Trinad  
LOCATION: Institut für Hygiene und Infektionskrankheiten der Tiere,  
Fus-Liebig-Universität Giessen, Giessen, Germany, 35392  
JOURNAL: Vet. Microbiol. DATE: 1996 VOLUME: 52 NUMBER: 1,2 PAGES:  
164 CODEN: VMICDQ ISSN: 0378-1135 LANGUAGE: English

3,AB/8 (Item 8 from file: 399)  
LOG(R)File 399:CA SEARCH(R)  
2004 American Chemical Society. All rts. reserv.

3079421 CA: 123(7)79421c JOURNAL  
Association of enterohemolysin and non-fermentation of rhamnose and  
glucose with Shiga-like toxin genes in Escherichia coli from calves  
THOR(S): Wieler, L. H.; Bauerfeind, R.; Weiss, R.; Pirro, F.; Baljer,  
G.  
LOCATION: Institut für Hygiene und Infektionskrankheiten der Tiere,  
Fus-Liebig-Universität Giessen, Giessen, Germany, D-35392  
JOURNAL: Zentralbl. Bakteriol. DATE: 1995 VOLUME: 282 NUMBER: 3  
PAGES: 265-274 CODEN: ZEBAE8 ISSN: 0934-8840 LANGUAGE: English

3,AB/9 (Item 9 from file: 399)  
LOG(R)File 399:CA SEARCH(R)  
2004 American Chemical Society. All rts. reserv.

22184960 CA: 122(15)184960e JOURNAL  
Construction of recombinant Shiga-like toxin-IIv (SLT-IIv) and its use in  
determining the SLT-IIv antibody status of pigs  
THOR(S): Franke, Sylvia; Gunzer, Florian; Wieler, Lothar H.; Baljer,  
G.; Karch, Helge  
LOCATION: Institut Hygiene und Mikrobiologie, Universitaet Wuerzburg,  
Wuerzburg, Germany, 97080

JOURNAL: Vet. Microbiol. DATE: 1995 VOLUME: 43 NUMBER: 1 PAGES: 41-52  
CODEN: VMICDQ ISSN: 0378-1135 LANGUAGE: English

4/3,AB/10 (Item 10 from file: 399)  
ALOG(R)File 399:CA SEARCH(R)  
) 2004 American Chemical Society. All rts. reserv.

117147078 CA: 117(15)147078z JOURNAL  
Characterization of shiga-like toxin producing Escherichia coli (SLTEC)  
isolated from calves with and without diarrhoea  
AUTHOR(S): Wieler, Lothar H.; Bauerfeind, Rolf; Baljer, Georg  
LOCATION: Inst. Hyg. Infektionskrankh. Tiere, Justus-Liebig-University,  
Gießen, Germany, W 6300  
JOURNAL: Zentralbl. Bakteriол. DATE: 1992 VOLUME: 276 NUMBER: 2  
PAGES: 243-53 CODEN: ZEBAE8 ISSN: 0934-8840 LANGUAGE: English

4/3,AB/11 (Item 1 from file: 162)  
ALOG(R)File 162:Global Health  
) 2004 CAB International. All rts. reserv.

723208 CAB Accession Number: 20002013740  
Enterohemorrhagic Escherichia coli (EHEC) strains of serogroup O118  
display three distinctive clonal groups of EHEC pathogens.  
Wieler, L. H.; Busse, B.; Steinruck, H.; Beutin, L.; Weber, A.; Karch,  
G.; Baljer, G.  
Institut für Mikrobiologie und Tierseuchen, Freie Universität Berlin,  
10115 Berlin, Germany.  
Journal of Clinical Microbiology volume 38 (6): p.2162-2169  
Publication Year: 2000  
ISSN: 0095-1137  
Language: English  
Document Type: Journal article  
A recent case report of a child infected with enterohaemorrhagic  
Escherichia coli (EHEC) of serotype O118:H16 in Bavaria, in association  
with the isolation of a bovine O118 strain on the same farm (A. Weber  
et al. Berl. Muench. Tierärztl. Wochenschr. (1997) 110, 211-213),  
prompted us to investigate the relationship between bovine and human  
strains of serogroup O118. A total of 29 human O118 E. coli strains from  
Europe (21), Canada (4), and Peru (4) were compared by virulence typing  
and macrorestriction analysis with 7 bovine O118 EHEC strains isolated in  
Bavaria during 1989-97. 25 of the human strains were characterized as  
EHEC. By serotyping and determination of the virulence-associated factors  
Shiga toxin (stx1 stx2 stx2 variants), intimin (eae), and EHEC  
haemolysin (HlyEHEC), 3 distinctive groups of O118 human pathogens were  
identified. Most of the strains belonged to serotype O118:H16, displaying  
the virulence traits Stx1, intimin, HlyEHEC, and EspP/Pssa (group 1). In  
addition, we identified strains of serotype O118:H12 (Stx2d only; group 2)  
and of serotype O118:H30 (Stx2 and intimin; group 3). Macrorestriction  
analysis with BlnI and XbaI revealed that all strains with a single O118  
serotype profile (O118:H12, O118:H16, and O118:H30) belonged to one clonal  
cluster, irrespective of their origin. Group 1 strains clustered in the  
same clonal group as the bovine O118:H16 strains. Moreover, 4 pairs of  
strains of different origins and indistinguishable by all other methods  
applied were identified as group 1 strains. Our data support the direct  
transmission of an EHEC O118:H16 strain from a calf to a 2-year-old boy in  
the above-mentioned case report. Since bovine and human O118:H16 strains  
represent the same clones, they must be considered zoonotic EHEC  
pathogens. In contrast, EHEC strains of serotypes O118:H12 and O118:H30  
have been isolated only from humans, indicating a reservoir for certain  
human O118 EHEC strains other than bovines. 37 reference

4/3,AB/12 (Item 2 from file: 162)  
ALOG(R)File 162:Global Health  
) 2004 CAB International. All rts. reserv.

537625 CAB Accession Number: 952206749

Neutralizing antibodies against %Shiga%-like toxins from Escherichia coli in colostrum and sera of cattle.

Pirro, F.; Wieler, L. H.; Failing, K.; Bauerfeind, R.; Baljer, G.

Institut für Hygiene und Infektionskrankheiten der Tiere, 35392 Giessen, Frankfurter Str. 89-91, Germany.

Veterinary Microbiology volume 43 (2/3): p.131-141

Publication Year: 1995

ISSN: 0378-1135

Language: English

Document Type: Journal article

Previous or present infection with %Shiga%-like toxin producing E. coli (SLTEC) was detected by an indirect neutralization assay of antibody titre. Bovine colostrum and sera blocked the cytotoxic effects of %Shiga%-like toxin on Vero cell monolayers. SLT neutralizing antibodies were present in 84.0% (189/225) of the colostrum samples from randomly chosen cows in Bavaria, Germany. While all of the colostrum with neutralizing activity reacted with SLT-I, only 14.7% neutralized both SLT-I and -II. Approximately 93.0% (37/40) of sera from heifers had SLT neutralizing activity. To quantify the neutralizing antibodies, colostrum were tested in the Vero cell assay for their capability to reduce the 50% cytotoxic dose (CD50) of SLT standards, where the neutralizing units/ml (nu/ml) equal the log10 of CD50 reduction. Almost half of reactive colostrum (48.7%) reduced the CD50 of the SLT-I standard by 104 to 105 (4-5 nu/ml). Higher reactivity (5-7 nu/ml) was found in 46.5% of positive colostrum. The remaining colostrum samples had over 7 nu/ml. To determine if the colostrum were blocking receptors for SLT on Vero cells, cells were preincubated with colostrum, and SLT was later added. No neutralizing activity was detected, indicating the reactivity of colostrum was directed against SLT. When the colostrum were subjected to ammonium sulphate precipitation and DEAE anion exchange chromatography, high levels of neutralizing activity were found in the IgG1 containing fractions. Colostrum fractions were tested for SLT-I binding antibodies in a capture ELISA, based on the binding of SLT-I to the toxin receptor analogue P1-glycoprotein. Only fractions from colostrum with over 5 nu/ml were reactive in this assay, indicating the ELISA was less sensitive than the Vero cell assay. The results support the theory that SLTEC exposure of cows in Germany is more widespread than expected from epidemiological studies based on bacterial isolation. This possibly indicated a higher risk of human SLTEC infection via beef and milk products. 38 reference

14/3,AB/13 (Item 1 from file: 50)

DIALOG(R)File 50:CAB Abstracts

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04130001 CAB Accession Number: 20013154900

Globotriaosylceramide (Gb3/CD77) is synthesized and surface expressed by bovine lymphocytes upon activation in vitro.

Menge, C.; Stamm, I.; Wührer, M.; Geyer, R.; Wieler, L. H.; Baljer, G.

Faculty of Veterinary Medicine, Institute for Hygiene and Infectious Diseases of Animals, Justus-Liebig-University, Frankfurter Str. 89-91, D-35392 Giessen, Germany.

Veterinary Immunology and Immunopathology volume 83 (1/2): p.19-36

Publication Year: 2001

ISSN: 0165-2427 --

Language: English

Document Type: Journal article

Neutral glycosphingolipids (GSLs) are considered activation markers on human lymphocytes, which are fundamental for studying the immune system. For cattle, only a limited number of activation markers has yet been identified. We recently showed that %Shiga% toxin 1, known to use globotriaosylceramide (Gb3 syn. CD77) as a cellular receptor, depresses proliferation of activated bovine lymphocytes (Infect. Immunol. 67 (1999b) 2209). In order to confirm the expression of Gb3/CD77 on bovine lymphocytes, we flowcytometrically examined a bovine B-lymphoma cell line (BL-3) and bovine peripheral blood mononuclear cells (PBMC) before and after mitogenic stimulation and biochemically characterized neutral GSLs extracted from PBMC. CD77 was detected on the surface of BL-3 cells and cultured PBMC essentially after mitogenic stimulation. Although expressed

y all PBMC subpopulations identified, the portion of CD77+ cells was highest for BoCD8+ cells, followed by B-cells and BoCD4+ cells at day 4 of cultivation. Ceramide trihexoside of stimulated PBMC was structurally determined as Gal(  $\alpha$  1-4)Gal(1-4)Glc(1-1)ceramide (Gb3). Biochemically, Gb3 was also detected within unstimulated PBMC which contained ceramide monohexoside (CMH) and Gb3 in a ratio of about 4 : 1. However, stimulation induced an increase of CMH and Gb3 by a factor of 2.5 and 10, respectively, implicating that bovine lymphocytes regulate surface expression of Gb3/CD77 predominantly by quantitative changes in the Gb3 metabolism. This report presents Gb3/CD77 as the first GSL identified on ovine immune cells and highly recommends this activation dependent antigen as a useful tool to investigate lymphocyte activation within the ovine immune system. 40 reference

4/3,AB/14 (Item 2 from file: 50)  
ALOG(R)File 50:CAB Abstracts  
c) 2004 CAB International. All rts. reserv.

586062 CAB Accession Number: 982211519  
Virulence properties of %Shiga% toxin-producing Escherichia coli (STEC) strains of serogroup O118, a major group of STEC pathogens in calves. Wieler, L. H.; Schwanitz, A.; Vieler, E.; Busse, B.; Steinruck, H.; Kaper, J. B.; Baljer, G.  
Institut für Hygiene und Infektionskrankheiten der Tiere, University of Giessen, D-35392 Giessen, Berlin, Germany.  
Journal of Clinical Microbiology volume 36 (6): p.1604-1607  
Publication Year: 1998  
ISSN: 0095-1137 --  
Language: English  
Document Type: Journal article  
To define their virulence properties, 42 O118 (38 O118:H16 and 4 O118:H-) strains isolated from calves (35 calves with diarrhoea and 5 without) displayed 3 different Stx combinations (Stx1 (36 of 42), Stx1 and Stx2 (2 of 42), and Stx2 (4 of 42)). A total of 41 strains (97.6%) harboured a large virulence-associated plasmid containing hlyEHEC (hly from enterohaemorrhagic E. coli). The strains' adhesive properties varied in relation to the eukaryotic cells tested. Only 28 of 42 strains (66.7%) showed localized adhesion (LA) in the human HEp-2 cell line. In contrast, in bovine fetal calf lung (FCL) cells, the number of LA-positive strains was much higher (37 of 42 (88.1%)). The locus of enterocyte effacement (LEE) was detected in 41 strains (97.6%). However, not all LEE-positive strains reacted positively in the fluorescence actin-staining (FAS) test, which indicated the attaching and effacing (AE) lesion. In HEp-2 cells, only 22 strains (52.4%) were FAS positive, while in FCL cells, the number of FAS-positive strains was significantly higher (38 of 42). It is concluded that most of the O118 STEC strains from calves (41 of 42 (97.6%)) have a high virulence potential (stx, hlyEHEC, and LEE). This virulence potential and the high prevalence of STEC O118 strains in calves suggest that these strains could be a major health threat for humans in the future. In addition, the poor association between results of the geno- and phenotypical tests to screen for the AE ability of STEC strains calls the diagnostic value of the FAS test into question. 31 reference

14/3,AB/15 (Item 3 from file: 50)  
IALOG(R)File 50:CAB Abstracts  
c) 2004 CAB International. All rts. reserv.

3014468 CAB Accession Number: 952207133  
Investigations on the immune response during oedema disease of weaned piglets by using a recombinant B subunit of %Shiga%-like toxin IIe.  
Original Title: Untersuchungen zur Immunantwort der Oedemkrankheit von Absetzferkeln mit einer rekombinanten B-Untereinheit des %Shiga%-like-Toxins-IIe.  
Wieler, L. H.; Franke, S.; Menge, C.; Rose, M.; Bauerfeind, R.; Karch, H.; Baljer, G.  
Institut für Hygiene und Infektionskrankheiten der Tiere, Justus-Liebig-Universität, Frankfurter Str. 89-91, D-35392 Giessen,

Germany.

Deutsche Tierärztliche Wochenschrift volume 102 (1): p.40-43

Publication Year: 1995

ISSN: 0341-6593 --

Language: German Summary Language: english

Document Type: Journal article

An outbreak of oedema disease (ED) was monitored in 80 weaned piglets over a period of 4 weeks. The shedding of %Shiga%-like toxin-IIe-producing *Escherichia coli* strains, the serum bactericidal activity (SBA) against SLTEC-IIe, and the antibody response against SLTEC-IIe was monitored by utilizing a glutathione-S-transferase (GST) + SLT-IIeB/SUB fusion protein for immunoblot assays. *E. coli* strain G015111 (O141:K85ac) was diagnosed as SLT-IIe-producing *E. coli* by polymerase chain reaction, DNA hybridization and cytotoxicity assays. Maximum excretion of G015111 appeared between days 8 and 15 after weaning. On day 1 after weaning no piglet shed G015111, while the number increased on day 8 to 53 (66.2%) and on day 15 to 59 (73.8%) of the piglets. 4 weeks after weaning G015111 was isolated from only 23 (28.8%) of the piglets. In parallel, serum bactericidal activity against G015111 increased significantly in the sera of 73 (91.2%) piglets, reaching a stable maximum from day 15 on. During the first 2 weeks after weaning no piglet yielded detectable SLT-IIe-IgG. However the number of SLT-IIe-IgG positive piglets increased steadily from day 15. On day 15, 5 (62%) piglets were positive in SLT-IIe immunoblot analysis and 29 days after weaning the number increased to 31 (38.8%). It was concluded that the recombinant protein was a useful diagnostic tool for monitoring the specific antibody status of piglets. 27 reference

14/3,AB/16 (Item 4 from file: 50)

IALOG(R)File 50:CAB Abstracts

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2674910 CAB Accession Number: 932232264

Importance and diagnosis of infections of farm animals with *Escherichia coli* strains producing %Shiga%-like toxin.

Original Title: Zur Bedeutung und Diagnostik von Infektionen landwirtschaftlicher Nutztiere mit %Shiga%-like-Toxin-produzierenden *E. coli* (SLTEC).

Wieler, L. H.; Bauerfeind, R.; Baljer, G.

Tierärztliche Umschau volume 47 (7): p.524-528, 533

Publication Year: 1992 --

Language: German Summary Language: english

Document Type: Journal article

14/3,AB/17 (Item 5 from file: 50)

IALOG(R)File 50:CAB Abstracts

c) 2004 CAB International. All rts. reserv.

2461591 CAB Accession Number: 912255786

Characteristics of alpha -hemolytic strains of *Escherichia coli* isolated from dogs with gastroenteritis.

Prada, J.; Baljer, G.; Rycke, J. de; Steinruck, H.; Zimmermann, S.; Stephan, R.; Beutin, L.

Robert Koch-Institut des Bundesgesundheitsamtes, Nordufer 20, D-1000 Berlin 65, Germany.

Veterinary Microbiology volume 29 (1): p.59-73

Publication Year: 1991

ISSN: 0378-1135 --

Language: English

Document Type: Journal article

In studies of the virulence markers and phenotypic properties of 24 haemolysin producing (Hly+) strains of *E. coli* isolated from dogs with gastroenteritis, the strains were distributed over 11 known *E. coli* O-serogroups and most of them were heterogeneous for their phenotypes. All strains were found to produce alpha -haemolysin which was detected by Southern hybridization and colony immunoblotting using a specific gene probe and a monoclonal antibody. Eight strains were carrying plasmids encoding alpha -haemolysin sequences (hly-plasmids) and 16 strains carried

chromosomal hly-determinants. 12 of the strains showed enterotoxigenic activities which were tested for in different assays. Among these, three 42:H37 and two O70:H- strains carrying hly-plasmids were found to harbour their plasmids encoding the heat-stable enterotoxin STA1. The other 7 strains showing enterotoxigenicity in the ileal loop or the suckling mouse assay were negative for STA1, STA2 or LT. None of the 24 strains was positive for invasiveness or for production of Vero (%Shiga%-like) toxins. The production of alpha-haemolysin was closely associated with the production of cytotoxic necrotizing factor (CNF), which was detected in 17 of 24 strains. Of these, 16 elaborated CNF1 and one strain produced an unknown CNF type. Surprisingly, all strains carrying ST-plasmids and 6 of 7 strains carrying hly-plasmids were negative for CNF. It is concluded that in canine E. coli strains CNF production seems to be closely associated with production of chromosomally encoded alpha-haemolysin whereas hly-plasmids are more often associated with ST-producing CNF negative isolates. 46 reference

14/3,AB/18 (Item 6 from file: 50)  
CAB LOG(R) File 50:CAB Abstracts  
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2277510 CAB Accession Number: 902222948  
Demonstration of verotoxin production by Escherichia coli by a cell culture test and DNA hybridization applied to faeces from calves with diarrhoea.

Original Title: Nachweis von Vero- (%Shiga%-like-) toxinbildenden E.-coli-Keimen (VTEC) mittels Zellkulturtest und DNA-Hybridisierung bei Durchfallkranken Kalbern.

Baljer, G.; Wieler, L.; Bauerfeind, R.; Ludwig, S. W.; Mayr, A.  
Institut Pathologie, Oberer Eselsberg M23, D-7900 Ulm, German Federal Republic.

Tierärztliche Umschau volume 45 (2): p.71...78

Publication Year: 1990 --

Language: German Summary Language: english

Document Type: Journal article

Verotoxin-forming strains of E. coli (responsible for haemorrhagic colitis in human beings) have been isolated from meat samples, and have been found in the faeces of calves in the USA and UK. In the Federal Republic of Germany, 150 strains isolated in 1985-1988 were negative, but 11 of 256 strains isolated since 1988 produced verotoxin, mostly of type 1. 24 reference

14/3,AB/19 (Item 7 from file: 50)  
CAB LOG(R) File 50:CAB Abstracts  
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1892640 CAB Accession Number: 872200856  
Attaching and effacing bacteria in the intestines of calves and cats with diarrhea.

Pospischil, A.; Mainil, J. G.; Baljer, G.; Moon, H. W.  
Dr. H.W. Moon, Nat. Anim. Dis. Center, PO Box 70, Ames, IA 50010, USA.  
Veterinary Pathology volume 24 (4): p.330-334

Publication Year: 1987

ISSN: 0300-9858 --

Language: English

Document Type: Journal article

Histopathological and electron microscopic examination of intestines of three calves and two cats revealed attaching effacing bacteria characteristic of enteropathogenic Escherichia coli (EPEC) in ileum, caecum and colon. The bacteria in one of the calves contained bacteriophages, and an E. coli isolate from that calf produced %Shiga%-like toxin. These findings contribute to emerging evidence that attaching effacing intestinal bacteria are globally distributed pathogens in a variety of host species and that bacteriophage-mediated production of %Shiga%-like toxin is related to the virulence of such bacteria. 27 reference

4/3,AB/20 (Item 1 from file: 10)  
ALOG(R)File 10:AGRICOLA  
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03981 23279386 Holding Library: AGL  
Globotriaosylveramide (Gb3/CD77) is synthesized and surface expressed by  
bovine lymphocytes upon activation in vitro  
Menge, C. Stamm, I.; Wuhrer, M.; Geyer, R.; Wieler, L.H.; %Baljer, G.%  
Amsterdam : Elsevier.  
Veterinary immunology and immunopathology. Nov 2001. v. 83 (1/2) p.  
9-36.

ISSN: 0165-2427 CODEN: VIIMDS  
DNAL CALL NO: SF757.2.V38

Language: English

Neutral glycosphingolipids (GSLs) are considered activation markers on  
human lymphocytes, which are fundamental for studying the immune system.  
For cattle, only a limited number of activation markers has yet been  
identified. We recently showed that %Shiga% toxin 1, known to use  
globotriaosylceramide (Gb3 syn. CD77) as a cellular receptor, depresses  
proliferation of activated bovine lymphocytes [Infect. Immunol. 67 (1999b)  
209]. In order to confirm the expression of Gb3/CD77 on bovine  
lymphocytes, we flow cytometrically examined a bovine B-lymphoma cell line  
BL-3) and bovine peripheral blood mononuclear cells (PBMC) before and  
after mitogenic stimulation and biochemically characterized neutral GSLs  
extracted from PBMC. CD77 was detected on the surface of BL-3 cells and  
cultured PBMC essentially after mitogenic stimulation. Although expressed  
by all PBMC subpopulations identified, the portion of CD77(+) cells was  
highest for BoCD8(+) cells, followed by B-cells and BoCD4(+) cells at day 4  
of cultivation. Ceramide trihexoside of stimulated PBMC was structurally  
determined as Gal(alpha1-4)Gal(1-4)Glc(1-1)ceramide (Gb3). Biochemically,  
Gb3 was also detected within unstimulated PBMC which contained ceramide  
monohexoside (CMH) and Gb3 in a ratio of about 4:1. However, stimulation  
induced an increase of CMH and Gb3 by a factor of 2.5 and 10, respectively,  
implicating that bovine lymphocytes regulate surface expression of Gb3/CD77  
predominantly by quantitative changes in the Gb3 metabolism. This report  
presents Gb3/CD77 as the first GSL identified on bovine immune cells and  
highly recommends this activation dependent antigen as a useful tool to  
investigate lymphocyte activation within the bovine immune system.

14/3,AB/21 (Item 1 from file: 65)  
IALOG(R)File 65:Inside Conferences  
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2210811 INSIDE CONFERENCE ITEM ID: CN023167076  
Effects of %Shiga%-like Toxin-I on Bovine Peripheral Immune Cells:  
Evidence for a Mode of Action Different from Cytotoxicity  
Menge, C.; Wieler, L. H.; Schlapp, T.; %Baljer, G.%  
CONFERENCE: Bacterial protein toxins-European workshop; 7th  
ZENTRALBLATT FUR BAKTERIOLOGIE -SUPPLEMENT-, 1996; SUPPL 28 P: 245-246  
Gustav Fischer, 1996  
ISSN: 0941-018X ISBN: 3437117335; 1560814454  
LANGUAGE: English DOCUMENT TYPE: Conference Papers  
CONFERENCE EDITOR(S): Frandsen, P. L.  
CONFERENCE DATE: Jul 1995 (199507) (199507)  
NOTE:  
Held at Hindsgavl; Denmark

14/3,AB/22 (Item 2 from file: 65)  
IALOG(R)File 65:Inside Conferences  
) 2004 BLDSC all rts. reserv. All rts. reserv.

0760172 INSIDE CONFERENCE ITEM ID: CN007421450  
Classification of bovine %Shiga%-like toxin (verocytotoxin)- producing  
Escherichia coli by cell culture assays and PCR  
Wieler, L. H.; Schlapp, T.; Erpenstein, C.; %Baljer, G.%  
CONFERENCE: Recent advances in verocytotoxin-producing Escherichia coli  
infections-2nd International symposium and workshop on verocytotoxin (



Shiga-like toxin)-producing Escherichia coli infections

EXCERPTA MEDICA INTERNATIONAL CONGRESS SERIES, 1994; VOL 1072 P: 291-294

Amsterdam, New York, Elsevier, 1994

ISSN: 0531-5131 ISBN: 0444818405

LANGUAGE: English DOCUMENT TYPE: Conference Papers

CONFERENCE EDITOR(S): Karmali, M. A.; Goglio, A. G.

CONFERENCE LOCATION: Bergamo, Italy

CONFERENCE DATE: Jun 1994 (199406) (199406)

NOTE:

Also known as VTEC '94

14/3,AB/23 (Item 3 from file: 65)

DIALOG(R)File 65:Inside Conferences

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00760148 INSIDE CONFERENCE ITEM ID: CN007421217

In vitro-studies on the effect of %Shiga%-like toxin-I ( verocytotoxin 1)

on bovine peripheral immune blood cells

Menge, C.; Wieler, L. H.; Schlapp, T.; %Baljer, G.%

CONFERENCE: Recent advances in verocytotoxin-producing Escherichia coli

infections-2nd International symposium and workshop on verocytotoxin (

Shiga-like toxin)-producing Escherichia coli infections

EXCERPTA MEDICA INTERNATIONAL CONGRESS SERIES, 1994; VOL 1072 P: 179-184

Amsterdam, New York, Elsevier, 1994

ISSN: 0531-5131 ISBN: 0444818405

LANGUAGE: English DOCUMENT TYPE: Conference Papers

CONFERENCE EDITOR(S): Karmali, M. A.; Goglio, A. G.

CONFERENCE LOCATION: Bergamo, Italy

CONFERENCE DATE: Jun 1994 (199406) (199406)

NOTE:

Also known as VTEC '94

14/3,AB/24 (Item 1 from file: 203)

DIALOG(R)File 203:AGRIS

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01939747 AGRIS No: 95-161171

Investigations on the immunoresponse during edema disease of piglets  
after weaning by using a recombinant B subunit of %Shiga%-like toxin IIe (

Untersuchungen zur Immunantwort bei der Oedemkrankheit von Absetzferkeln

mit einer rekombinanten B-Untereinheit des %Shiga%-like-Toxins-IIe)

Wieler, L.H. (Goettingen University (Germany). Inst. fuer Hygiene und

Infektionskrankheiten der Tiere); Franke, S.; Menge, C.; Rose, M.;

Bauerfeind, R.; Karch, H.; Baljer, G.

Journal: Deutsche Tieraerztliche Wochenschrift, 1995, v. 102(1) p. 40-43

Language: German Summary Language: German, English

14/3,AB/25 (Item 2 from file: 203)

DIALOG(R)File 203:AGRIS

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01481845 AGRIS No: 90-136371

Demonstration of verotoxin producing Escherichia coli (VTEC) in cell  
cultures and DNA-hybridization in calf faeces (Nachweis von Vero- (%Shiga%

-Like-) toxinbildenden E.-coli-Keimen (VTEC) mittels Zellkulturtest und

DNA-Hybridisierung bei durchfallkranken Kaelbern)

Baljer, G. (Ulm Universitaet (Germany, F.R.). Institut fuer Pathologie

und Rechtsmedizin); Wieler, L.; Bauerfeind, R.; Ludwig, S.B.; Mayr, A.

Journal: Tieraerztliche Umschau, 1990, v. 45(2) p. 71-78

Language: German Summary Language: German, English

ef	Items	Index-term
25	4	AU=FRANKE, STEVEN J
26	10	AU=FRANKE, STEVEN J.
27	1	AU=FRANKE, STEVEN JOHN
28	2	AU=FRANKE, SUSAN
29	3	AU=FRANKE, SUSANNE
30	1	AU=FRANKE, SUZANNE
31	9	AU=FRANKE, SYBILLE
32	21	AU=FRANKE, SYLVIA
33	1	AU=FRANKE, T
34	72	AU=FRANKE, T.
35	1	AU=FRANKE, T. A.
36	6	AU=FRANKE, T. F.

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>>>Duplicate detection is not supported for File 342.
>>>Duplicate detection is not supported for File 345.
>>>Duplicate detection is not supported for File 286.
>>>Duplicate detection is not supported for File 19.
>>>Duplicate detection is not supported for File 128.
>>>Duplicate detection is not supported for File 429.

>>>Records from unsupported files will be retained in the RD set.
..completed examining records
S16      12 RD (unique items)
p t s16/3,ab/1-12
>>>No matching display code(s) found in file(s): 65, 128, 135, 180, 342,
345, 398, 429
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16/3,AB/1      (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
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140107952      CA: 140(8)107952y      JOURNAL
First step towards a quantitative model describing Czc-mediated heavy
metal resistance in Ralstonia metallidurans
AUTHOR(S): Legatzki, Antje; Franke, Sylvia; Lucke, Susann; Hoffmann, Toni
Anton, Andreas; Neumann, Dieter; Nies, Dietrich H.
LOCATION: Institut fuer Mikrobiologie, Halle, Germany, 06099
JOURNAL: Biodegradation (Biodegradation) DATE: 2003 VOLUME: 14
NUMBER: 2 PAGES: 153-168 CODEN: BIODEG ISSN: 0923-9820 LANGUAGE:
English PUBLISHER: Kluwer Academic Publishers
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16/3,AB/2      (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 2004 American Chemical Society. All rts. reserv.

135367592      CA: 135(26)367592z      JOURNAL
The product of the ybdE gene of the Escherichia coli chromosome is
involved in detoxification of silver ions
AUTHOR(S): Franke, Sylvia; Grass, Gregor; Nies, Dietrich H.
LOCATION: Institut fuer Mikrobiologie der Martin-Luther-Universitat
Halle-Wittenberg, Halle, Germany, 06099
JOURNAL: Microbiology (Reading, U. K.) DATE: 2001 VOLUME: 147 NUMBER:
4 PAGES: 965-972 CODEN: MROBEO ISSN: 1350-0872 LANGUAGE: English
PUBLISHER: Society for General Microbiology
```

5/3,AB/3 (Item 3 from file: 399)  
ALOG(R)File 399:CA SEARCH(R)  
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135269790 CA: 135(19)269790t JOURNAL  
ZitB (YbgR), a member of the cation diffusion facilitator family, is an  
ditional zinc transporter in *Escherichia coli*  
AUTHOR(S): Grass, Gregor; Fan, Bin; Rosen, Barry P.; Franke, Sylvia;  
es, Dietrich H.; Rensing, Christopher  
LOCATION: Department of Soil, Water, University of Arizona, Tucson, AZ,  
721, USA  
JOURNAL: J. Bacteriol. DATE: 2001 VOLUME: 183 NUMBER: 15 PAGES:  
54-4667 CODEN: JOBAA Y ISSN: 0021-9193 LANGUAGE: English PUBLISHER:  
merican Society for Microbiology

5/3,AB/4 (Item 4 from file: 399)  
ALOG(R)File 399:CA SEARCH(R)  
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135031105 CA: 135(3)31105y JOURNAL  
The AIDA autotransporter system is associated with F18 and Stx2e in  
*Escherichia coli* isolates from pigs diagnosed with edema disease and  
stweaning diarrhea  
AUTHOR(S): Niewerth, Ulla; Frey, Andreas; Voss, Thomas; Le Bouguenec,  
antal; Baljer, Georg; Franke, Sylvia; Schmidt, M. Alexander  
LOCATION: Institut fur Infektiologie, Zentrum fur Molekularbiologie der  
tzundung, Westfalische Wilhelms-Universitat, Munster, Germany, D-48149  
JOURNAL: Clin. Diagn. Laboratory Immunol. DATE: 2001 VOLUME: 8 NUMBER: 1  
PAGES: 143-149 CODEN: CDIMEN ISSN: 1071-412X LANGUAGE: English  
PUBLISHER: American Society for Microbiology

6/3,AB/5 (Item 5 from file: 399)  
ALOG(R)File 399:CA SEARCH(R)  
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131098388 CA: 131(8)98388d JOURNAL  
Transcriptional organization of the czc heavy-metal homeostasis  
terminant from *Alcaligenes eutrophus*  
AUTHOR(S): Grosse, Cornelia; Grass, Gregor; Anton, Andreas; Franke,  
lvia; Santos, Alexander Navarrete; Lawley, Blair; Brown, Nigel L.; Nies,  
etrich H.  
LOCATION: Institut fur Mikrobiologie der Martin-Luther-Universitat  
lle-Wittenberg, Halle, Germany, D-06099  
JOURNAL: J. Bacteriol. DATE: 1999 VOLUME: 181 NUMBER: 8 PAGES:  
85-2393 CODEN: JOBAA Y ISSN: 0021-9193 LANGUAGE: English PUBLISHER:  
merican Society for Microbiology

6/3,AB/6 (Item 6 from file: 399)  
ALOG(R)File 399:CA SEARCH(R)  
2004 American Chemical Society. All rts. reserv.

124252174 CA: 124(19)252174v JOURNAL  
Analysis of the enterohemorrhagic *Escherichia coli* O157 DNA region  
ntaining lambdoid phage gene p and Shiga-like toxin structural genes  
AUTHOR(S): Datz, Martina; Janetzki-Mittmann, Claudia; Franke, Sylvia;  
nzer, Florian; Schmidt, Herbert; Karch, Helge  
LOCATION: Inst. Hygiene Mikrobiol., University Wuerzburg, Wuerzburg, Germany,  
080  
JOURNAL: Appl. Environ. Microbiol. DATE: 1996 VOLUME: 62 NUMBER: 3  
PAGES: 791-7 CODEN: AEMIDF ISSN: 0099-2240 LANGUAGE: English

6/3,AB/7 (Item 7 from file: 399)  
ALOG(R)File 399:CA SEARCH(R)  
2004 American Chemical Society. All rts. reserv.

124112090 CA: 124(9)112090g JOURNAL  
Clonal relatedness of shiga-like toxin-producing Escherichia coli O101  
strains of human and porcine origin  
AUTHOR(S): Franke, Sylvia; Harmsen, Dag; Caprioli, Alfredo; Pierard,  
Jens; Wieler, Lothar H.; Karch, Helge  
LOCATION: Institut für Hygiene und Mikrobiologie, Universität Würzburg,  
Würzburg, Germany, 97080  
JOURNAL: J. Clin. Microbiol. DATE: 1995 VOLUME: 33 NUMBER: 12 PAGES:  
74-8 CODEN: JCMIDW ISSN: 0095-1137 LANGUAGE: English

6/3,AB/8 (Item 8 from file: 399)  
ALOG(R)File 399:CA SEARCH(R)  
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123276954 CA: 123(21)276954e JOURNAL  
Development of PCR for screening of enteroaggregative Escherichia coli  
AUTHOR(S): Schmidt, Herbert; Knop, Christiane; Franke, Sylvia; Aleksic,  
Suzana; Heesemann, Juergen; Karch, Helge  
LOCATION: Institut für Hygiene und Mikrobiologie, Universität Würzburg,  
Würzburg, Germany, 97080  
JOURNAL: J. Clin. Microbiol. DATE: 1995 VOLUME: 33 NUMBER: 3 PAGES:  
1-5 CODEN: JCMIDW ISSN: 0095-1137 LANGUAGE: English

6/3,AB/9 (Item 9 from file: 399)  
ALOG(R)File 399:CA SEARCH(R)  
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122184960 CA: 122(15)184960e JOURNAL  
Construction of recombinant Shiga-like toxin-IIv (SLT-IIv) and its use in  
monitoring the SLT-IIv antibody status of pigs  
AUTHOR(S): Franke, Sylvia; Gunzer, Florian; Wieler, Lothar H.; Baljer,  
Georg; Karch, Helge  
LOCATION: Institut Hygiene und Mikrobiologie, Universitaet Wuerzburg,  
Würzburg, Germany, 97080  
JOURNAL: Vet. Microbiol. DATE: 1995 VOLUME: 43 NUMBER: 1 PAGES: 41-52  
CODEN: VMICDQ ISSN: 0378-1135 LANGUAGE: English

6/3,AB/10 (Item 10 from file: 399)  
ALOG(R)File 399:CA SEARCH(R)  
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122002737 CA: 122(1)2737g JOURNAL  
Differentiation in virulence patterns of Escherichia coli possessing eae  
genes  
AUTHOR(S): Schmidt, Herbert; Plaschke, Barbara; Franke, Sylvia;  
Heesemann, Holger; Schwarzkopf, Andreas; Heesemann, Juergen; Karch, Helge  
LOCATION: Inst. für Hyg. und Mikrobiol., University Würzburg, Würzburg,  
Germany, D-97080  
JOURNAL: Med. Microbiol. Immunol. DATE: 1994 VOLUME: 183 NUMBER: 1  
PAGES: 23-31 CODEN: MMIYAO ISSN: 0300-8584 LANGUAGE: English

6/3,AB/11 (Item 11 from file: 399)  
ALOG(R)File 399:CA SEARCH(R)  
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122002087 CA: 122(1)2087v JOURNAL  
Nucleotide sequence analysis of enteropathogenic Escherichia coli (EPEC)  
adherence factor probe and development of PCR for rapid detection of EPEC  
harboring virulence plasmids  
AUTHOR(S): Franke, Juergen; Franke, Sylvia; Schmidt, Herbert;  
Schwarzkopf, Andreas; Wieler, Lothar H.; Baljer, Georg; Beutin, Lothar;  
Karch, Helge  
LOCATION: Institut Hygiene und Mikrobiologie, Universitaet Würzburg,  
Würzburg, Germany, 97080

JOURNAL: J. Clin. Microbiol. DATE: 1994 VOLUME: 32 NUMBER: 10 PAGES:  
10-3 CODEN: JCMIDW ISSN: 0095-1137 LANGUAGE: English

/3,AB/12 (Item 1 from file: 98)  
LOG(R)File 98:General Sci Abs/Full-Text  
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29159 H.W. WILSON RECORD NUMBER: BGSA03229159  
Molecular Analysis of the Copper-Transporting Efflux System CusCFBA of  
Escherichia coli.  
Tanke, Sylvia\*  
Ass, Gregor; Rensing, Christopher  
Journal of Bacteriology (J Bacteriol) v. 185 no13 (July 2003) p. 3804-12  
SPECIAL FEATURES: bibl graph il tab ISSN: 0021-9193  
LANGUAGE: English  
COUNTRY OF PUBLICATION: United States

ABSTRACT: The cusCFBA operon of Escherichia coli was characterized. The  
cusCFBA operon encodes proteins used for copper efflux. CusA and CusB were  
necessary for copper resistance, and CusC and CusF were essential for full  
resistance. Met-573, -623, and -672 in CusA were of functional importance.  
CusF, a periplasmic protein, bound one copper per polypeptide. Methionine  
residues of CusF were involved in copper binding, and the protein  
interacted with CusB and CusC polypeptides in a yeast 2-hybrid assay. Cus  
is a tetrapartite resistance system involving the novel periplasmic  
copper-binding protein CusF. The findings support the hypothesis that Cu(I)  
is directly transported from the periplasm across the outer membrane by the  
Cus complex.

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t  Items  Description
20537  SHIGA (1W) TOXIN
    1  S1 AND 2E (1W) SHIGA (1W) TOXIN
    229  S1 AND STX2E
    3  S3 AND STX2EB
    3  RD (unique items)
2034  S1 AND STX2
    132  S6 AND S3
    4  S7 AND HIS
    4  RD (unique items)
0 20537  SHIGA (1W) TOXIN
1 229  S10 AND STX2E
2 284  E1-E5
3 49  S12 AND SHIGA
4 25  RD (unique items)
5 21  AU='FRANKE, SYLVIA'
6 12  RD (unique items)
s s1 and shiga (1w) toxin (2w) II
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mpleted processing all files
    20537  S1
    36142  SHIGA
    762528  TOXIN
    7886238  II
        2900  SHIGA(1W)TOXIN(2W)II
    S17 2900  S1 AND SHIGA (1W) TOXIN (2W) II
s s17 and shiga (1w) toxin
    2900  S17
    36142  SHIGA
    762528  TOXIN
    20537  SHIGA(1W)TOXIN
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*terminal (1w) tag*

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Set	Items	Description
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ecuting TD291  
 light option is not available in file(s) 19, 398, 399  
 LIGHT set on as '%'  
 36142 SHIGA  
 762528 TOXIN  
 S1 20537 SHIGA (1W)TOXIN  
 s s1 and terminal (1w) tag  
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